equipment **102** and a second value being indicative for a data traffic characteristic of the user equipment **102**. The comparison unit is adapted to compare the first value and the second value. The control unit is adapted to set a release timer based on the comparison and is further adapted to control the radio resource control connection based on the release timer, wherein the radio resource control connection will end upon expiry of the release timer.

[0075] The base station may be any type of access point or point of attachment, which is capable of providing a wireless access to a cellular network system. Thereby, the wireless access may be provided for the user equipment, or for any other network element, which is capable of communicating in a wireless manner. The base station may be a NodeB, eNB, home NodeB or HeNB, or any other kind of access point.

[0076] The base station may comprise a receiving unit, for example a receiver as known by a skilled person. The base station may also comprise a transmitting or sending unit, for example a transmitter. The receiver and the transmitter may be implemented as one single unit, for example as a transceiver **301**. The transceiver or the receiving unit and the sending unit may be adapted to communicate with the user equipment via an antenna.

[0077] The determination unit **302**, the comparison unit **303** and the control unit **304** may be implemented as single units or may be implemented for example as part of a standard control unit, like a CPU or a microcontroller.

[0078] The user equipment (UE) may be any type of communication end device, which is capable of connecting with the described base station. The UE may be in particular a cellular mobile phone, a Personal Digital Assistant (PDA), a notebook computer, a printer and/or any other movable communication device. In particular, in the context of this application, a UE may be any kind of communication device, for example a smart phone, being able to run so called always-on applications. Always-on applications in this context may denote applications requiring regularly transmitted control messages, also called keep-alive messages.

[0079] The user equipment may comprise a receiving unit or receiver which is adapted for receiving signals from the base station. The user equipment may comprise a transmitting unit for transmitting signals. The transmitting unit may be a transmitter as known by a skilled person. The receiver and the transmitting unit may be implemented as one single unit, for example as a transceiver **305**. The transceiver or the receiver and the transmitting unit may be adapted to communicate with the base station via an antenna.

[0080] The user equipment may further comprise a control unit **306** being adapted to determine an average heartbeat time as mentioned above. The control unit may be further adapted to control the RRC connection between the user equipment and the base station, in particular based on the release timer set by the base station. The release timer may be communicated to the user equipment or an expiring of the release timer may be communicated to the user equipment implicitly by ending the RRC connection. The control unit may be implemented as a single unit or may be implemented for example as part of a standard control unit, like a CPU or a microcontroller.

[0081] Having regard to the subject matter disclosed herein, it should be mentioned that, although some embodiments refer to a "base station", "eNB", etc., it should be understood that each of these references is considered to implicitly disclose a respective reference to the general term "network component" or, in still other embodiments, to the term "network access node". Also other terms which relate to specific standards or specific communication techniques are considered to implicitly disclose the respective general term with the desired functionality.

[0082] It should further be noted that a base station as disclosed herein is not limited to dedicated entities as described in some embodiments. Rather, the herein disclosed subject matter may be implemented in various ways in various locations in the communication network while still providing the desired functionality.

[0083] According to embodiments of the invention, any suitable entity (e.g. components, units and devices) disclosed herein, e.g. the control unit, are at least in part provided in the form of respective computer programs which enable a processor device to provide the functionality of the respective entities as disclosed herein. According to other embodiments, any suitable entity disclosed herein may be provided in hardware. According to other—hybrid—embodiments, some entities may be provided in software while other entities are provided in hardware.

[0084] It should be noted that any entity disclosed herein (e.g. components, units and devices) are not limited to a dedicated entity as described in some embodiments. Rather, the herein disclosed subject matter may be implemented in various ways and with various granularities on device level while still providing the desired functionality. Further, it should be noted that according to embodiments a separate entity (e.g. a software module, a hardware module or a hybrid module) may be provided for each of the functions disclosed herein. According to other embodiments, an entity (e.g. a software module, a hardware module or a hybrid module (combined software/hardware module)) is configured for providing two or more functions as disclosed herein.

[0085] It should be noted that the term "comprising" does not exclude other elements or steps. It may also be possible in further refinements of the invention to combine features from different embodiments described herein above. It should also be noted that reference signs in the claims should not be construed as limiting the scope of the claims.

LIST OF REFERENCE SIGNS

[0086] **100** Cellular network system
[0087] **101** Base station
[0088] **102** User equipment
[0089] **103** Cell
[0090] **200** State transition model
[0091] **201** RRC connected state
[0092] **202** RRC idle state
[0093] **203** RRC connection setup
[0094] **204** RRC connection release
[0095] **205** Handover
[0096] **400** Cellular network system
[0097] **401** Transceiver of the base station
[0098] **402** Determination unit of the base station
[0099] **403** Comparison unit of the base station
[0100] **404** Control unit of the base station
[0101] **405** Transceiver of the user equipment
[0102] **406** Control unit of the user equipment

1. A method for controlling a radio resource control connection between a base station and a user equipment, wherein a radio resource control connection between the base station and the user equipment is established for exchanging control messages between the base station and the user equipment,